ABSTRACT

The invention provides a power supply or drive circuit for a pulsed flashlamp which utilizes a two-core component having common windings as both an inductor for arc mode drive and for breakdown triggering of the lamp. Discharge of a capacitor through the inductor and lamp is controlled by a high-speed semiconductor switch which is turned on and off by a suitable control, current flowing from the inductor through a one-way path including the lamp when the switch is off. The control maintains the ratio of the power variation through the lamp to the average power through the lamp substantially constant. The controls may also be utilized to control output pulse shape. Novel protective features are also provided for circuit components during turn on periods for the switch.